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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------------------------------------------------------|-------------|----------------------|------------------------------------|------------------|
| 10/697,532 | 10/30/2003 | Hao A. Chen | 3620-064-01 | 7566 |
| 33432 | 7590 | 09/23/2005 | | |
| KILYK & BOWERSOX, P.L.L.C. 400 HOLIDAY COURT SUITE 102 WARRENTON, VA 20186 | | | EXAMINER WATKINS III, WILLIAM P | |
| | | | ART UNIT 1772 | PAPER NUMBER |

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------------------|-------------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/697,532 | CHEN ET AL. | |
| | Examiner William P. Watkins III | Art Unit 1772 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10 May 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-39 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

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DETAILED ACTION

1. The rejection under 35 USC 103 using U.S. 6,617,009 given in section 7 of the detailed portion of the office action mailed 24 February 2005 is withdrawn in view of applicant's statement of common ownership on page 8 of the response filed 10 May 2005.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansson et al. (U.S. 6,465,046 B1) in view of Casto (U.S. 1,947,459).

Hansson et al. teaches the formation of a floor covering by optionally coating a core of wood or other material with an acrylic layer, then printing a digital pattern on the layer, then coating a wear coating which may be a multi-layer structure and contain nano-particles to enhance wear, followed by

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embossing of the layers in registration with the printing (col.3, lines 35-55, col.4, lines 10-30, col.4, line 65-col.5, line 40, col.6, lines 5-25). Casto teaches forming a wood grain pattern on a surfacing material by embossing the core first then putting pigment into the embossed areas in order to create a realistic design, the core may be coated and the coating embossed and the embossments filled with pigment to get multicolor effects. (page 2, lines 5-150). The instant invention claims embossing a core, or a coating layer on a core with a design, and then printing in registration with the design by a digital printer with a high resolution. It would have been obvious to one of ordinary skill in the art to have formed embossments in the core or coating layers of Hansson et al. then printing in registration with digital means in order to make a better simulation of wood grain and other natural patterns because of the teachings of Casto.

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-39 of U.S. Patent No. 6,617,009 in view of Hansson et al. (U.S. 6,465,046 B1) and Casto (U.S. 1,947,459).

The '009 patent claims a print layer with a cover layer on a core. The secondary references teach embossing and digital printing of a wood grain layer to have a better simulation. The instant claims would have been obvious in view of the '009 claims as modified by the secondary references in order to provide a better simulation. As the instant application is latter filed only a one way showing is needed.

6. Claims 1-39 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7-21, 31-33, 37-40 and 42-54 of

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copending Application No. 09/630,121 in view of Hansson et al.

(U.S. 6,465,046 B1) and Casto (U.S. 1,947,459).

The '121 application claims printing on a core with a cover layer. The secondary references teach embossing and digital printing of a wood grain layer to have a better simulation. The instant claims would have been obvious in view of the '121 claims as modified by the secondary references in order to provide a better simulation. As the instant application is latter filed only a one way showing is needed.

This is a provisional obviousness-type double patenting rejection.

7. Claims 1-39 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 45-73 of copending Application No. 10/909,684 in view of Hansson et al. (U.S. 6,465,046 B1) and Casto (U.S. 1,947,459).

The '684 application claims a print layer on a core with a cover layer. The secondary references teach embossing and digital printing of a wood grain layer to have a better simulation. The instant claims would have been obvious in view of the '684 claims as modified by the secondary references in

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order to provide a better simulation. As the claims of the '684 application could have been earlier presented in the parent application only a one way showing is needed.

This is a provisional obviousness-type double patenting rejection.

8. Applicant's arguments filed 10 may 2005 have been fully considered but they are not persuasive.

Applicant argues regarding both the art and double patenting rejections that Casto just teaches forming depressions and filling them with pigment which is not printing in applicant's view and that there is no motivation to combine Casto with Hansson et al. The examiner disagrees. Page 2, lines 90-130 of Casto teaches the reproduction of an image of a wood grain surface on a relief plate by a photo etching process so that the relief plate will produce half tones, full tones and quarter tones in the embossed surface in order to reproduce the image of the wood grain. Claims 4 and 5 describe the relief plate as having a reverse "intaglio" surface. Half tone, full tone, quarter tone, and intaglio are specific terms in the printing art. As the process of Casto reproduces an image in a surface using pigment and uses many terms from the printing art,

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the examiner is of the opinion that one of ordinary skill in the art would clearly consider that Casto teaches a form of printing.

Regarding motivation, Casto teaches a printing process that produces the appearance of wood grain, marble and tile and that these appearances are "highly pleasing" when the process is used. Hansson et al. also has a printing and embossing process for wood grain patterns (col. 1, lines 18-22). There is motivation to modify Hansson by embossing then printing in the depressions to get a "highly pleasing" result.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dreasy et al. (U.S. 3,486,919) is cited as a being cumulative to Casto in teaching embossing and then printing in registration with the depressions to produce a natural wood grain appearance.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this

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action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Watkins III whose telephone number is 571-272-1503. The examiner works an increased flex time schedule, but can normally be reached Monday through Friday, 11:30 A.M. through 8:00 P.M. Eastern Time. The examiner returns all calls within one business day unless an extended absence is noted on his voice mail greeting.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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WW/ww

September 18, 2005



WILLIAM P. WATKINS III
PRIMARY EXAMINER